

AMENDMENTS TO THE CLAIMS

1 to 25. (Cancelled)

26. (New) A branched copolymer comprising an acrylic copolymer comprising at least one core arm comprising at least one acrylic core polymer and at least one shell arm comprising at least one acrylic shell polymer where said acrylic copolymer is obtained by transition metal catalyzed radical polymerization and has a polydispersity of from 3 to 10, and where (a) the core polymer has a polydispersity of at least 2 and a T_g of from -65°C to -20°C, and (b) the shell polymer has a T_g of from 70°C to 160°C;
where the branched polymer is a star shaped thermoplastic elastomer acrylic block copolymer with a number average molecular weight (M_n) of greater than 100 kilodaltons obtained by transition metal catalyzed radical polymerization.

27. (New) The copolymer as claimed in claim 26, which is substantially free of a region obtained by an amine functional ethylenically unsaturated radically polymerizable monomer.

28. (New) The copolymer as claimed in claim 26, which is obtained by transition metal catalyzed radical polymerization.

29. (New) The copolymer as claimed in claim 26, in which the core arms have a M_n of from 60 to 250 kilodaltons, and the shell arms have an M_n of from 20 to 80 kilodaltons.

30. (New) The copolymer as claimed in claim 26, wherein the mass percentage of shell arms in the copolymer is from 10% to 50%.

31. (New) The copolymer as claimed in claim 26, wherein the polymer precursors from which the core arms are obtained are monomers selected from the group consisting of: C₁₋₁₀ alkyl

acrylates, amyl acrylates, stearyl acrylate, lauryl acrylates, mixtures thereof and derivatives thereof.

32. (New) The copolymer as claimed in claim 31, where the monomers are selected from the group consisting of: methyl acrylate, ethyl acrylate, n-propyl acrylate, isopropyl acrylate, n-butyl acrylate, tert-butyl acrylate, sec-butyl acrylate, isobutyl acrylate, amyl acrylate, hexyl acrylate, 2-ethylhexyl acrylate, octyl acrylate, nonyl acrylate, decyl acrylate, stearyl acrylate, lauryl acrylate and mixtures thereof.

33. (New) The copolymer as claimed in claim 32, wherein the monomers are selected from the group consisting of: methyl methacrylate, ethyl methacrylate, tert-butyl acrylate, cyclohexyl methacrylate, isobornyl methacrylate and mixtures thereof.

34. (New) The copolymer as claimed in claim 26, wherein the core the shell arms further comprise polymeric moieties obtained from at least one monomer selected from the group consisting of: glycidyl methacrylate, tert-butyl (meth)acrylate, hydroxy (meth)acrylates, styrene, mixtures thereof and derivatives thereof.

35. (New) The adhesive composition comprising a branched copolymer as claimed in any of claims 26 to 34.

36. (New) The adhesive as claimed in claim 35, which further comprises from 5 to 150 phr of a tackifier, calculated by the weight of the copolymer.

37. (New) The adhesive as claimed in claim 36, which comprises from 25 to 150 phr of a tackifier.

38. (New) The adhesive as claimed in claim 35, which is selected from the group consisting of: a pressure sensitive adhesive and a hot-melt adhesive.